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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/294,656	04/19/1999	MICHAEL J. CUSSON	ORACLE01.001	6372

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GORDON E NELSON
57 CENTRAL ST
PO BOX 782
ROWLEY, MA 01969

EXAMINER

COLBERT, ELLA

ART UNIT

PAPER NUMBER

3624

DATE MAILED: 12/02/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/294,656

Applicant(s)

CUSSON ET AL.

Examiner

Ella Colbert

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 24-35, 53-60, 84-93 and 112-131 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 24-35, 53-60, 84-93 and 112-131 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 09 September 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 24-35, 53-60, 84-93, and 112-131 are pending in this communication filed 09/09/02, entered as Response to Non-Final Office Action, paper no. 21.
2. The drawing objection has been overcome by Applicants' submission of legible drawings and is hereby withdrawn.
3. The Specification objection has been overcome by Applicants' explanation of the objected to pages and lines and Applicants' amendment to the Specification and is hereby withdrawn.
4. The first paragraph of 35 U.S.C. 112 rejection still stands for the reasons below (see Response to Arguments section).

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:
The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
6. Newly added claims 112-131 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification. The added material which is not supported by the original Specification is as follows: Claims 112-131 recite "objects, distributed database system, redirector, or specifier/specifiers" which are not mentioned in Applicants' Specification or drawings. Therefore, there is a lack of support in Applicants' Specification for these claim limitations.

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Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 24-35, 53-60, and 84-93 are rejected under 35 U.S.C. 103(a) as being unpatentable over (US 5,924,096) Draper et al, hereafter Draper.

With respect to claims 24, 34, & 84, Draper teaches, a queryable cache that contains copies of certain of the datasets and is local to the server (col. 2, lines 47-55 and col. 4, lines 23-28); the improved server receiving a query for a remote dataset in a form required by the interface from the program (col. 1, lines 53-55, col. 4, lines 23-28 and lines 61-67, and col. 5, lines 1-2). Draper did not teach determining whether a copy of the dataset to be queried is present in the queryable cache and if the copy is present, querying the copy, and otherwise querying the remote dataset or whereby the queryable cache is transparent to the program, but it would have been obvious to one having ordinary skill in the art at the time the invention was made to determine whether a copy of the dataset to be queried is present in the queryable cache and if the copy is present, querying the copy, and otherwise querying the remote dataset or whereby the queryable cache is transparent to the program and to modify in Draper in view of Draper's teachings of querying, copying, and cache because such a modification would allow Draper's system to have a process of extracting data from a database and presenting it for use and using a special memory subsystem which frequently uses data values that are duplicated for quick access.

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With respect to claims 25, 35, and 85, Draper teaches, the program uses global identifiers for the remote data sets and the copies in the queryable cache have local identifiers (col. 1, lines 56-67, col. 2, lines 1-6, col. 5, lines 47-65 and col. 6, lines 8-48); and the improved server (col. 4, lines 31-35) further comprises: a query analyzer that receives the global identifier for a dataset being queried and if there is a copy of the data set indicated by the global identifier returns the local identifier to the server (col. 5, lines 38-56), the server using the local identifier to query the copy (col. 6, lines 61-67 and col. 7, lines 1-3).

With respect to claims 26, 53, and 93, Draper teaches, the query analyzer further indicates to the server whether the copy of the dataset is in the queryable cache (col. 7, lines 9-20).

With respect to claims 27, 54, and 86, Draper teaches, a dataset manager that determines a dataset for which a copy is needed in the cache obtains a copy of the remote dataset and adds the copy to the cache (col. 7, lines 59-67 and col. 8, lines 11-22).

With respect to claims 28, 55, and 87, Draper teaches, the dataset manager further determines a dataset for which a copy is no longer needed in the cache and removes the copy from the cache (col. 6, lines 37-48 and col. 7, lines 59-64).

With respect claims 29, 56, and 88, Draper teaches, the dataset manager determines whether to add or remove a dataset by determining a likelihood that a query will be made to the dataset (col. 6, lines 15-21).

With respect to claims 30, 57, and 89, Draper teaches, a query log that lists past queries that have been made to the standard interface (col. 10, lines 22-53) and the dataset manager uses the query log to determine a likelihood that a query will be made to a dataset (col. 6, lines 15-21).

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With respect to claims 31, 58, 59, 90, and 91, Draper teaches, the dataset manager uses information about an event that will result in queries to a dataset to determine a likelihood that a query will be made to a dataset (col. 7, lines 9-52).

With respect to claim 32, Draper teaches, the dataset manager uses information about a time of occurrence of the event to determine a likelihood that a query will be made to a dataset (col. 6, lines 61-67 and col. 7, lines 1-3).

With respect to claims 33, 60, and 92, Draper did not teach, when a change occurs in a remote dataset of the remote datasets, an indication including the change is sent to the server without intervention by the server and the improved server further comprises: and update receiver that receives the indication and modifies any copy of the changed dataset as required by the indication, but it would have been obvious to one having ordinary skill in the art at the time the invention was made to when a change occurs in a remote dataset of the remote datasets, an indication including the change is sent to the server without intervention by the server and the improved server further comprises: and update receiver that receives the indication and modifies any copy of the changed dataset as required by the indication and to modify in Draper in view of his teachings of servers (col. 4, lines 23-28), copies (col. 8, lines 12-14), updating (col. 9, lines 30-31) and modifying (col. 8, lines 51-55) because such a modification would allow Draper's system to have an improved system for distributed database caching which reduces the amount of unnecessary data sent between the nodes.

Response to Arguments

8. Applicant's arguments filed 009/09/02 have been fully considered but they are not persuasive.

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Applicants' argue: when looked at in light of MPEP 2163-2163.05's discussion of the Written Description requirement of 35 U.S.C. 112, first paragraph, the rejection is clearly problematical and first, there is no requirement that the Specification contain the terminology used in the claims has been considered but is not persuasive based on the Examiner must find a showing in Applicants' Specification in such a manner as the terminology used can be understood by the Examiner. While Applicants' may be their own lexicographer, the Examiner must be able to understand from reading Applicants' Specification what is meant by the terminology used in the claim elements. Otherwise, it is considered that Applicants' have failed to particularly point out and to claim that which they regard as their invention. Further, the Examiner finds no evidence that the Specification at page 12, lines 15-24 discloses the "request" of the claim is embodied in the queries of the present application, the "plurality of database systems" is at least embodied in cache database 347 and source database 241, with cache database 347 embodying the "first database system" and source database 241 embodying 347 the "second database system." The "redirector" is embodied in DA interface 304 and query dispatcher 351. The manner in which these components of this embodiment of the invention interact to "respond[] to the request when the request includes a specifier that cannot be interpreted in the first database system by causing the request to be executed at least in part in a second database system of the plurality, the request otherwise being executed in the first database system".

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In conclusion, the Examiner has made every attempt to point out and to identify what portions of the amendment lack support in the originally filed disclosure and to fully explain the basis of this finding.

2. Applicants' argue: the Examiner has failed to make a *prima facie* case for the rejection of claims 24, 34, and 84 has been considered but is not persuasive based on the Examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). It is assumed that which is not taught in the reference/references relies to some extent on the knowledge of persons skilled in the art to complement that which is known and the skilled artisan is presumed to know something more about the art than only what is disclosed in the applied reference/references.

Sources of Rationale Supporting a Rejection under 35 U.S.C. 103: Rationale may be in a reference, or reasoned from common knowledge in the art, scientific principles, art-recognized equivalents, or legal precedent. See MPEP 2144.

3. Applicants' argue: there is nothing in Draper from which it can be concluded that Draper's cache is queryable and there is simply no disclosure whatever in Draper about the interfaces used in the servers to query the database has been considered but is not persuasive because the Examiner interprets Draper as teaching a

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queryable cache in the background in col. 1, lines 51-55 and servers in col. 3, lines 65-67 and col. 4, lines 1-3 and lines 23-35. Interfaces are well known in the art and are defined as the points at which a connection is made between two elements so that they can work with each other.

4. Applicants' argue: Applicants' global and local identifiers are used in queries and have nothing whatever to do with Draper's tags and clearly none of this has anything to do with determining whether a particular copy of the dataset is in the queryable cache has been considered but is not persuasive because the Examiner interprets Draper as teaching global and local identifiers are used in queries in col. 1, lines 66-67 and col. 2, lines 1-4, col. 5, lines 57-62. Tagging is known in the art to be used as a means of identification in querying and determining whether a particular copy of the dataset is in the queryable cache is interpreted as being in col. 7, lines 9-20.

5. Applicants' argue: There is simply nothing in Draper about a "likelihood that a query will be made" or about using such a likelihood to determine whether to add or remove a dataset has been considered but is not persuasive because it is interpreted that Draper teaches adding data in col. 6, lines 19-21 and lines 64-67 and col. 1-3.

6. Applicants' argue: the Examiner employs a single reference in a rejection under 35 U.S.C. 103 and supplies the limitations that are not disclosed in Draper by simply stating that inclusion of the missing limitations would have been obvious, it is not clear what Examiner is relying on for the limitations that are not present in Draper, and should she in fact be relying on official notice of scientific theory or common knowledge in the art, Applicants' attorney respectfully requests that Examiner cite a reference that

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illustrates the theory or shows the common knowledge in the art as set forth in MPEP 2144.03 has been considered but has been responded to in argument no. 2, *supra*.

In conclusion, the Examiner carefully drew up a correspondence of each of Applicants' claimed limitations, one or more referenced passages in Draper, what is well known in the art and what is obvious to one having ordinary skill in the art at the time the invention was made.

The Examiner is entitled to give the claim limitations their broadest reasonable interpretation in light of the Specification (see below):

2111 Claim Interpretation; Broadest Reasonable Interpretation [R-1]

>CLAIMS MUST BE GIVEN THEIR BROADEST REASONABLE INTERPRETATION

During patent examination, the pending claims must be "given the broadest reasonable interpretation consistent with the specification." Applicant always has the opportunity to amend the claims during prosecution and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 162 USPO 541,550-51 (CCA 1969)<.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

INQUIRIES

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ella Colbert whose telephone number is 703-308-7064. The examiner can normally be reached on Monday-Thursday from 6:30 am -5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent Millin can be reached on 703-308-1038. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7687 for Official communications and 703-746-5622 for Non-Official communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.


E. Colbert
November 26, 2002

VINCENT MILLIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER


VINCENT MILLIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600